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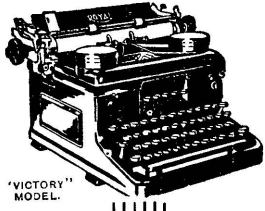

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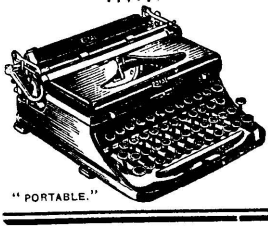

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THE
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Parapsychology

(Diary Leaves.)

BY NICHOLAS ROERICH.

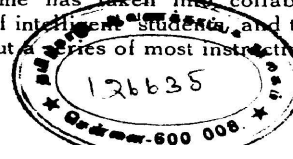
NEW upward flights of thought bring to life new words. Not so long ago the concept of Psychology won for itself the right of acceptance,— we need not repeat the significance of this Greek word, for it is sufficiently well known to everyone. Psychology has gradually conquered new fields and penetrated into the depths of the human consciousness. It has been linked with neurology and dealt with in the "Institutes of the Brain," it has touched upon the domain of the heart and concentrated upon the study of energy and thought.

Long ago Plato asserted that Ideas rule the world, but only comparatively recently has a science of thought been constituted. It is quite natural that this broadest of provinces should require a new and refined designation. Thus there has resulted the significant superstructure upon the concept of Psychology, there was born Parapsychology. Radio waves, sensitive photographic films, and many new paths of science have become allied with the fields of Parapsychology, and not by chance has man's attention been drawn to this higher domain which must transform many of the basic features of life.

In the dark period of the Middle Ages, any investigations into the region of Parapsychology would surely have

been terminated by the inquisition with torture and the stake. And even now our contemporary "inquisitors" are not above accusing learned investigators of sorcery or insanity. We recall how our friend, the late Professor Bechterev, was not only subjected to official persecutions for his research into the study of thought, but in the devious turns of public opinion, there were more than once heard whispers about a nervous malady of the scholar himself. We likewise know that for their research in the domain of thought serious scientists have been visited with all sorts of official annoyance, and sometimes have even been deprived of university appointments. This has happened both in Europe and in America. But evolution flows on over any human obstructions and calumnies. Evolution is unyieldingly resistant to dark ignorance, and life itself displays the brilliant advancement of that which even in the recent past would have aroused the scoffing of the ignorant. Surely, we cannot forget that even in our own time one scientific Academy pronounced Edison's phonograph the trick of a charlatan. Not so long ago a certain physician asserted that since micro-organisms required such great magnification for study of them, they could have absolutely no significance or application in medical practice! You may see statements of this kind being circulated right now by the printed word. But since stagnation has an ossifying effect, all the live portions of humanity will be irresistibly impelled to true broad cognition.

We know that in America alone some forty scholars are occupied with the study of thought energy. Before us lies copies of the journal, "Parapsychology," published under the editorship of Professor Rhine (Duke University, South Carolina) and his books "Extra Sensory Perception" and "New Frontiers of the Mind." Professors Rhine and Mac Dougall have worked for many years upon thought transmission at a distance. We have already had occasion to make note of their brilliant results in this field. Now Professor Rhine has taken into collaboration an entire large group of intelligent students, and together with them has carried out a series of most instructive experiments.



At first the transmission of thoughts was effected at the shortest intervals and in the simplest formulas; after this the experiments passed on to involve greater distances and were made complicated in the thought content. In the course of several years it became established that thought can undoubtedly be transmitted at a distance and that for this people do not at all have to become some sort of devotees of the supernatural, but that they can operate within the limits of the mind and the will. It is unquestionable that the domain of thought, the field of disclosure of the subtlest primary energy, has been ordained for the immediately forthcoming days of humanity. Thus precisely science, call it material science or positive or as you please, but precisely scientific cognition will reveal to mankind those domains to which the most ancient symbols have alluded.

If world thought be directed along a definite path, a great number of unexpected auxiliaries can be discerned by the observant mind of the investigator. People have appeared, sometimes most ordinary ones, who can detect radio waves without a receiver, or can see through dense objects, thus confirming the fact that the senses can act outside the limits of physical conditions.

There is a young girl in Latvia who reads thoughts, doing this under the surveillance of physicians and scholars. Medical supervision excludes any sort of charlatanism or self-interested exploitation. In the last analysis such phenomenon ceases to be supernatural since through training, the students of the University in South Carolina can attain very significant results by perfectly natural means.

Likewise extremely remarkable are experiments with a recently devised apparatus which records most subtle pulsations of the heart which have hitherto been undetected. Recently Dr. Anita Muhl described to us most interesting experiments performed by her. These showed that lofty thought heightened tension enormously and refined the vibrations, whereas ordinary thought, not to mention that of a low order, immediately lowered the vibrations. Moreover it was noticed that the unified thought of a group

of people constituting a chain augmented tension extraordinarily. Doctor Muhl brought back observations made during her recent visit to Iceland and Denmark, and now India, where she is sojourning, will undoubtedly provide her with new impulses.

Of course, any such considerations, even though confirmed by mechanical apparatus, will continue to remain "terra incognita" for the majority of people. But fortunately evolution has never been brought about by the majority, but has been realised by an unselfish minority who are ready to subject themselves to the thrusts of the ignorant. But the right judgment of history is inevitable. The names of ignorant opponents of knowledge become symbols of infamous retrogression. The name of Herostratus, who destroyed works of art, has remained in school books, but not at all in connection with the matters which this madman had in mind. The names of the ignoramuses who voted for the expulsion of the great Aristides from Athens have recently been discovered in the course of excavations upon the Acropolis and added to the dark roster of the ignorant and the deniers. Surely we cannot forget the man who could detect radio waves without apparatus and who in our civilized days immured in an insane asylum because physicians of a certain type could not admit the existence of this faculty. In general many human capacities confound people of a sluggish retrogressive nature, and these will have to pass through many shameful hours, when all the things which they have denied shall occupy a place in the precise sciences.

Even at present certain obscurantists regard the transmission of thought at a distance as verging on witchcraft. We can cite examples when this field, already established by scores of scientists, provokes gross ridicule and mocking cries about the reception of news out of the blue sky. Without speaking of the examples recorded in the literature of all ages and peoples, it is permissible to remind the ignorant that the radio-waves which have already become a part of their everyday life also are received precisely out of the blue sky. It is sad to reflect

that people give no thought to many obvious manifestations and to the cosmic fundamentals or laws which lie behind them. Sometimes the ignorant are not averse to repeating parrot-like certain truisms without understanding their significance. Thus those who jeer at news from the blue sky do not suspect that they are speaking about what has already been established by scientific investigations and recorded by machines.

So much has been said and written about the subtlest energies, which are so gradually being apprehended by humanity! The absurd prohibitions created by the inertia of stagnant deniers are beginning to fall away. Only yesterday we read about the establishment of a special governmental committee for the investigation of Hindu popular medicine. The ordinances of the Ajur-Veda, so recently ridiculed, are coming to life again under the hand of enlightened scholars. In Moscow has been founded an Institute for the Study of Tibetan Medicine; western scientists have found to be of vast significance the indications given in ancient Chinese annals which are entirely conformable to the latest European scientific discoveries. And the ancient medicine-man who brewed a portion from toads has found his justification in contemporary science which has revealed the large quantity of adrenalin in these amphibians; moreover there has been found in these creatures a new substance, buffonin, which is closely akin to digitalis. One might cite a multitude of examples among similar latest discoveries. The ass hide of Chinese medicine has also been justified in the matter of vitamin content by the latest researches of Doctor Reed.

Another scientist, Doctor Reele, has determined under the most ancient symbols the existence of indications, the significance of which has now been understood and thus advanced by science. In such manner, in different branches of science, the ancient elements of knowledge are making their appearance under a new and entirely modern aspect. If these parallels be collected, there results a voluminous treatise. But the crowning dome of all these quests will be that fundamental domain which now goes

under the name of Parapsychology, because in its basis lies everywhere that same great primary or psychic energy. The visionary dream of thought has already been formulated in the science of thought. Human thought which anticipates all discoveries is borne into space and reaches the human consciousness precisely "out of the blue sky." The brain activity of man is comparable to electrical phenomena; recently the biologist G. Lakhovsky asserted that all ethical teachings have a definitely biological foundation. Thus in its turn Lakhovsky's work confirms the experiments of Doctor Muhl with electrical apparatus which records graphically the significance of qualities of thought. Even the myth about the cap of invisibility receives scientific confirmation in the discovery of rays which make objects invisible. Thus there arises everywhere new and boundless knowledge replacing recent negations and mockery. To all deniers can only be given the advice,— "know more, and stop not your ears with the wadding of criminal ignorance." In remote antiquity it was said that ignorance is the forefather of all crimes and offences, of all miseries and calamities.

Call it Parapsychology or science of thought, be it revealed as psychic or primary energy, it is alone clear that evolution imperatively directs mankind to the discovery of the subtlest energies. Unprejudiced science is striving in quests for new energies in space, that infinite source of all forces and all cognition. Our age is the epoch of a World-outlook based on Energetics.

Folk Songs in India

By ARNOLD A. BAKE, D. LITT.

[Dr. Arnold Bake of Brasnose College, Oxford, Fellowship Research Scholar, is now touring in Malabar. He arrived in Palghat on 13th April and during his brief stay in this town recorded Indian folk songs. He is particularly interested in Sama Veda music and has succeeded while here in filming a few pieces from the above Veda. The following address which he delivered at the Cochin Rotary Club has been sent by him for publication in the pages of *The Scholar*. —*Ed.*]

THE late French scholar Sylvain Levi once wrote that the immense importance music had in the culture of Ancient India had not been sufficiently realised by any orientalist. The term music must be taken in its widest sense, but definitely with the attribute religious. This will not surprise anyone as the whole of Indian culture is based upon religion. Even in our days it is difficult to separate religion from any of the cultural activities of daily life. Even in politics I think I am safe in saying that Mahatma Gandhi's success is largely due to his appeal to the religious sense of the masses. We may never lose sight of this aspect of Indian culture, any other angle of approach is likely to make us miss the essential quality of Indian life. Therefore I think Oxford was entirely right when they founded a Fellowship for research in the field of music, to describe it as survey of the religious songs and music of India, for actually that covers the whole field. From the very beginning music has been felt in India as an essential means to establish the contact with the world outside man, without which no religious ceremony private or official has any importance. In India this link was created rather vocally than instrumentally; that is to say, it was the intoned word, the chanted text, the mantra, that brought the super-human forces into action. The essence of all Vedic sacrifices was the Brahman, the chanted formula, and the effect of the well executed ceremony the maintenance of cosmic order. No amount of libations, fires and other ceremonies had any importance without the chanted text and the hymns of the Samaveda that were

not only chanted but even sung. Within the totality of Vedic offerings we see the complete development of vocal music from the intoned text to the hymn that is definitely sung. From the beginning it is the musical value of the declamation that matters, the same words spoken in the ordinary way would have no effect. This belief has survived up to our days, that it is only the correctly executed mantra that can have effect. It is here that I encounter the greatest difficulties in my work. Anyone can read the correct text of, for instance, Samaveda in any number of printed books; many tantric mantras have been published one way or the other, but when it comes to recording them in what I would call, their live form, the line is drawn, and, in ninety nine cases out of a hundred, cannot be crossed. It is one of the marvels of India that it, generally speaking, does not allow things of the spirit to die. Hinduism in absorbing all kinds of creeds and beliefs from its converts only slightly veiled their origin and let them exist side by side creating a kind of higher unity in which apparent flagrant discrepancies simply do not exist. Consequently the scale of Indian culture represents all shades of tone, and offers an unparalleled field for research in cultural history. When we pass from the Vedic music into the domain of classical music, which recognised the Vedic tradition as one of its roots, we see that this belief in the cosmic activity of the correctly uttered sounds does not disappear but gets clothed in legends and fairy tales increasing in number most probably as the actual influence of music so amply testified by references in the Sanskrit literature of the classical period — gradually became less and less in the daily life of the people. Music, apart from the liturgical field, definitely was considered to be a means of liberation ; it was when practised well Mukti itself, deliverance from the endless cycle of births and deaths. As I see it, however, classical Indian music changed in course of time from a daily necessity to a more and more refined pleasure for the chosen few, practised by overtrained professionals for over refined patrons to listen to. By this process it lost touch with real life and had to pay the fine by becoming

artificial instead of art. A great change has set in, but classical music will suffer for some time from the effects of that period when it was regarded mainly as a means to display skill and technique.

There is, however, a domain in Indian life where music remained, until fairly recently, a daily necessity. In the life of the people of the villages every activity was accompanied by songs. The whole of the varied life of the Indian people is reflected in their songs. It is funny that the classical music praised as a Moksamarga should have become as dry as dust in many instances, whereas the despised decimusic, said to be only for the pleasure of the people, should have preserved immense spiritual wealth. Apart from the traditional wisdom contained in the hereditary songs of daily activities the spiritual food is given entirely through the medium of music. The great popular renascence of the whole of India during the middle ages, from the days of Ramanuja onwards spread through the medium of music and even the poorest find solace for the inequities of their life through music—Cart-pushers in Ernakulam were heard to lighten their burden by singing a song describing life under king Mahabali, when everyone had equal rights. The bond between God and the human soul is vivid in the consciousness of every Indian peasant as exemplified in the love of Krishna and the Gopis. Even when to outsiders the similes seem altogether too realistic the singers themselves never lose sight of the real meaning of the song. And what would be the life of the people without the songs of Tukaram, Mirabai, Kabir, Nanak and the long succession of South Indian saints; from olden times up to Tyagaraja ?

It is impossible to understand the real life of India without knowledge of this vast field from which the people of India have harvested their spiritual food for centuries and again it is here the same case as with the mantras I mentioned in the beginning of this talk, the reading of the printed words does not really mean much, the real importance and the spiritual effect are felt only when they are sung in the proper way. Here again it is music

which establishes the link with the world outside man; it is music which makes man outstep his human limitations. As Tagore puts it, only the melody can tell us of the comings and goings of the divine bird that brings tidings from the bondless unknown beyond.

So we see that from the Vedas upto the Folksongs of India it is the intimate unity between words and melody that really accounts for the spiritual importance. In reading the words one may understand them, but it is only when hearing them sung in the right way that their spiritual influence is felt.

Some Attributes of Quality in Rice

By Dr. A. SREENIVASAN, M. A., D. Sc., A. I. C.,

[The following article is the first of a series to be published in successive numbers of our journal. These, together with one published on 'Parboiled Rice' in our Annual Number for 1936, form a treatise complete in itself and present in popular language all the aspects of the question. —*Ed.*]

ICE is the staple food of the majority of the people in India and the East in general. Indeed, it ranks foremost among the foods of the nations of the world. The estimated normal yield is about four hundred and fifty billion pounds of rough rice against three hundred billion pounds of the second crop, wheat. More than a third of the total cultivated area of India is under rice. There are several thousands of distinct varieties in existence and new ones are being evolved year after year. The attempts of the breeder have all along been concentrated on improving the yield and other hereditary qualities that enable the cultivation of a successful crop. With recent researches in the field of nutrition and with the improvements in present day methods of agriculture, there has been a general impetus given to a study of the different items of quality in rice.

Quality, as popularly understood, is rather difficult to define. In some cases, it is made up of certain physical characters such as size, shape, colour, or behaviour on milling or on cooking. In others, it depends largely on properties such as taste and flavour which are somewhat vague entities but are, nevertheless, quite real. Quality often includes a recognition of the general nutritive value, digestibility, energy value, presence of certain essential food constituents and such like. As articles possessing the right quality are in great demand and fetch good prices, it is naturally of considerable interest, both to the producer and to the consumer, to determine the nature of the factors that determine quality and the conditions that favour its development.

In most food products, as with rice, the different items of quality could best be dealt with separately from the points of view of the producer, the salesman and the buyer who is also the consumer. The reason is that an article regarded as finest in quality by the cultivator or the exporter, is not necessarily so according to the consumer. Indeed, it will soon be apparent that the reverse is more often true.

Agronomic Factors:- We shall first consider quality in rice in relation to prevalent agricultural practices.

The most important of the agronomic characteristics of rice varieties is the yield. This characteristic is hereditary in the sense that with the best possible treatment or with any definite practical treatment, each variety will produce a crop characteristic in amount of that variety. Resistance to adverse weather conditions, pests and diseases, decreased shedding and increased ease of harvesting are some of the other features for which particular varieties find favour in the choice of the agriculturist.

The great number of rice varieties is an expression of the fact that this grain is highly specialized in its adaptation to local conditions. Chief among them is the adaptability to varying amounts of water. Depending upon the extent of irrigation and environment, rice is classed as upland or lowland paddy and irrigated or dry crop. Irrigated rice is in general the more productive because rice is naturally a plant of wet places and because it is less exposed to vicissitudes of weather. Even those varieties of rice which are dry-cultivated are more productive if irrigated. But in certain places rice is grown as a dry crop and valued as such.

Length of the growing season is another important character distinguishing rice varieties. It varies from a scant three months to a full eight months. The ryot chooses the short period crop in anticipation of either irrigation facilities for two or more crops in a season or unfavourable climatic conditions which might destroy a long-standing crop. It is generally believed that short duration

varieties are poorer in quality than long duration ones because they are assumed to remove less of plant food from the soil. Thus, in South India, short duration *Kuruvai* or *Kar* varieties are not valued so much for their nutritive qualities as the long duration *Samba* ones. Similarly, in Bengal we have the *Aus* rice which is held inferior to the *Aman* rice.

Varieties differ in their demand for and response to manuring. In addition, it has recently been stated by a number of workers that grain and fodder crops treated with organic manures are richer in regard to vitamins and other growth-promoting factors than those receiving mineral fertilizers. We are not as yet in a position to assess the qualities of rice raised under different treatments, but there is no doubt that organic manures supply the plant with a more complete fertilizer including some of the indispensable rare elements which are so valuable as food constituents in small traces.

Variations in harvesting practices are many, but the miller realises that when the sheaves are allowed to remain after harvest in the field for a few days and then put into stacks, sometimes for over a month, before being finally threshed, the produce improves in certain qualities. The rice is said to undergo some sort of curing which is not very well understood.

Market Value : Dealing next with quality in relation to market value, one of the items of chief importance is the ratio of the yield of rice to paddy. This varies generally between seventy and eighty-five per cent, and usually coarse and big grained varieties have a smaller proportion of hull than the small grains. Rainy weather during the setting period of the crop, an outbreak of diseases and a mixture of varieties of rice bring down the yield of rice to paddy.

Size of grain is a very familiar character determining the market value of rice varieties. The classification is more or less as coarse, medium or fine. The finer varieties, liked by the rich and well-to-do, fetch high prices.

But the poor, who consume parboiled rice, like the coarse varieties.

Another important quality finds expression in the appearance and texture of the grain. Some varieties are hard and flinty while others are soft and mealy. The latter are usually characterized by a white starchy abdomen and they easily break while milling. The harder and vitreous grains suffer less by breakage during milling and hence obtain a better price in the market. These also keep and stand shipment better than the usually softer and opaque rices. Glutinous rice has uniformly chalky and not very hard kernels. Such rice is sometimes called dextrinous, because of their high percentage of soluble starch and dextrins. They cook to a pasty mass and are useful for special preparations. Very little is known regarding the nature of the relationship between hard, soft and glutinous rice varieties in regard to the make-up of starch.

One other general classification is into white and coloured rices; the coloured grain includes pink, red, purple and even black, in various shades. The colour is always superficial. In rice-growing lands, the preference is everywhere for white rice; there is no market for red rice as such and the presence of red grains depreciates the price greatly. In a few places, recognized coloured varieties are deliberately grown because of distinctive high yield or the belief that they are especially nutritious.

Flavour in rice is a varietal character and is largely a matter of taste and choice. A large section of the population of Northern India exercise a preference for scented rices.

Polishing of Rice: Exported rice and a very large part of the grain used for home consumption is entirely mill-pounded and polished. Indeed, in most western countries, unpolished rice as obtained by de-husking paddy is still considered unfinished and unfit for consumption. The unpolished rice does not keep well; in a tropical climate, it rapidly loses its flavour. Again, it becomes infested with insects which destroy the outer mealy layer of the

grain; the rice soon becomes moldy. To produce white polished rice which can be handled without commercial hazard, the rice kernel is passed through a combined scraping and polishing process. This removes the outer coating of the kernel known as the silver-skin and the germ or the embryo.

The keeping quality of rice has been the subject of investigation by the writer and it may be stated that as a result of storage, the rice bran which contains highly unsaturated fatty acids undergoes rapid and day-to-day deterioration. The outer coatings of the unpolished rice grain contain a very resistant fat-splitting enzyme and under the action of moisture and this enzyme, the bran is easily decomposed resulting in a mixture of free fatty acids. These latter in turn undergo oxidation and the fats acquire an unpleasant odour and taste and become rancid. There is therefore, a rapid increase in the acid number and the free fatty acids of the bran, although the rate of formation of these latter decreases with storing due, no doubt, to the products themselves. There is also a decided decrease in the fat content of stored hulled rice Desiccation combined with air-tight packing can successfully be employed for the preservation of unpolished rice.

Rice bran is a by-product of the rice mill industry and polished rice, on account of its better keeping quality, taste and clean white appearance, sells at a higher price than unpolished rice. In addition, the bran fetches a price of its own. These would account for the unpolished rice not being a popular article.

Parboiled rice: The yield of head rice comprising the whole kernels is an important item both for the grower and the miller. The factors which contribute to high milling quality in rice are yet ill-defined. The soft and mealy types of rice grain and the coarse-grained varieties, which are also usually short duration crops, break enormously during milling.

From very early times it has been recognised that parboiling improves the milling quality of rice. The process of parboiling not only loosens the husk, but it also

toughens the grain, thus permitting of more severe milling. Parboiling to varying extents and by different treatments affects the milling quality of rice also to different degrees. This question has been systematically gone into by the author with regard to a number of rice varieties and in his experience, although it is not possible to single out any particular treatment of parboiling which can be said to be the best in regard to the milling quality of all rice varieties it may, nevertheless, be stated that soaking for two or three days at ordinary temperatures followed by steaming at 110° for 15 minutes gives good results with most varieties.

Parboiled rice is also reputed for its better keeping quality. This may be due to the action of heat on the fat-splitting enzyme and or to a change in the nature and make-up of the fat and rice oil. Parboiled rice is liked by a certain section of the consumers for its flavour; when cooked, it keeps well for considerable lengths of time, either by itself or soaked under water. Besides, it is claimed to possess greater sustaining power.

Irrespective of the variety chosen, parboiled rice is generally darker in colour than the corresponding raw rice. Under certain carefully controlled conditions, it is possible to produce parboiled rice with minimum discolouration. Commercial specimens of parboiled rice often have an objectionable flavour, which is due essentially to bad water being used for soaking and to undesirable fermentation changes during steeping. This latter can be minimised by addition of certain chemicals like acid sulphites to the steep water. Ideally prepared parboiled rice has, indeed, a pleasing flavour.

Storage in Rice: It is a matter of common experience that rice prepared out of freshly harvested paddy is unfit for consumption and sells at a discount in the market. Although there is as yet no means whereby new rice can as such be distinguished from stored rice, yet the difference between the two becomes manifest on cooking. The one cooks to a shapeless pasty condition — swelling scarcely

to twice the volume of the original uncooked rice—, while the other cooks to a fine fluffy consistency, the volume of the cooked product being 4 to 5 times that originally. This process of curing after harvest is necessary before the rice is rendered fit for consumption. Long duration crops are believed to require less period of storage than short duration ones. Storage changes are hastened when the paddy is kept underground or in air-tight containers. Refrigeration retards improvement on storage. It is believed that storage results in a widening of the capillaries of the rice grain and consequent imbibition of greater amounts of water on cooking.

Cooking Quality : The cooking quality of rice is, no doubt, an important item from the commercial aspect of quality. It is the sum total of a number of factors such as grain shape, time of cooking, fragrance and colour of cooked rice, length of kernel on cooking, taste, touch or feeling in the throat when masticated, bursting of the kernel, liquid-absorbing capacity, volume of cooked rice in relation to that of the uncooked, amount of bran present and quality of the rice in general. The water absorbing power and the time taken to imbibe the maximum amount of water are the most important among these.

It has been experienced that with different specimens of *dhal*, the cooking quality varies considerably, some requiring long, continued boiling to reach the desired stage whilst others cook quickly. The quality of the water used for boiling has a considerable effect upon the rate of cooking. In presence of certain alkaline salts, the rate of cooking is accelerated. Likewise, it would appear that, with rice, the capacity for swelling on cooking, can be greatly increased by the agency of certain external factors.

The Guides.

The moon alone can never show the way
Towards the region of the coming Day,
Therefore the Seven Stars like powerful kings,
Are set above to guide our wanderings:
Sound of a higher life is heard when we
Live with the utmost of simplicity,
No thought or wish determines from below
The way we travel or to where we go:
Leave far behind all that is of the past,
And move to where the Flame that cannot cast
A shadow, calls us on eternally
Towards a state of perfect harmony.

Barnett D. Conlan.

Tales from Indian History

By Prof. V. RANGACHARYA, M.A.

Princess Zeb-un-nisa.

THE height to which a Muslim lady could reach in the days of the Mughal Empire in the field of culture and literature is illustrated by the case of Zeb-un-nisa, 'the ornament of womanhood', the eldest of the five daughters of Emperor Aurangzeb. Born at Daulat-a-bad on 15 February 1638 while Aurangzeb was Viceroy of the Dakkan, Zeb, whose mother was a Persian lady of the name of Dilras Banu Begum, began to scale the ladder of fame even as a girl. She had an exquisitely-made mind, and is said to have won the heart of her puritanic father by a singularly marvellous and incredible achievement—the committing of the whole of the *Koran* by heart in her eighth year. The gratified prince characteristically placed her on a pedestal rarely allowed to any other human being, and rewarded her achievement with the presentation of a sum of 30,000 gold pieces which she, looking at the world with a suave benevolence, distributed among the poor. Aurang-zeb signalised the unique occasion by ordering the public offices to be closed for two days and the imperial forces to be feasted to their heart's content. Placed under the tutor-ship of a learned lady named Hafiza Marium, who was the wife of a Kashmirian nobleman who had originally hailed from Khorassan, Zeb became, in the course of four years, a scholar in Arabic and Persian, and an expert in the sciences of Astronomy and Mathematics.*

Zeb-un-nisa was for a life, if not nun-like, at all events closely interwoven with spirituality. Clinging to the rungs of literary ambition, she instinctively withdrew, even in the midst of the whirl of social delights open to the Mughal princesses, into a shell of intellectual reserve, and devoted herself to the acquisition of mastery over the intricate teachings of the Muslim theology as well as Hindu

* A learned and short notice of Zeb-un-nisa's life is available in Prof. J. Sarkar's *Studies in Mughal India* (1919), pp. 79–90.

philosophy. She was, in fact, an admirer as well as favourite of the unfortunate Dara Shikoh, whose kindred spirit she was. Continually in prayer with Alla, she announced her wish to write a commentary on the Koran; and she would have done it but for the singularly serious temperament of her father who regarded it as a sacrilege. Zeb-un-nisa also wanted to do something that would endure in Arabic poetry, but on being told by a critic that her verses, though marvellous for her sex, age and race, naturally lacked in the correct idiom of a born Arab, she changed her field of literary work to Persian where she was confident she could reach perfection. Aurangzeb's puritanism made him an enemy of poets; but Zeb was a poetess of no mean order, and would not be moulded to the lifeless pattern he desired. She deliberately broke the fetters of conventional obscurity. Bound by social conventions and restrictions, restricted by her father's crusade against the very art in which she shone, she rose superior to her environment, and, answering to the compelling urge of her heavenly gift, laid her thoughts bare in verses which have been accorded a high place in Indo-Muslim poetry. Under the pen-name of *Makhfi* (the concealed one), she composed certain Persian *Diwans* or odes, which some have not hesitated to compare, in respect of diction, delicacy and sweetness, with the works of Hafiz.* Zeb-un-nisa was a fine calligraphist, and displayed exquisite art in writing the *nastaliq*, *naskh* and *shikasta* styles of the Persian script. She owned the most extensive library then in existence. She had a crazy love for the illumination of even her conversation with verses. She showered marks of patronage on all those who had writing for their career. Her generosity to men of letters was boundless, and they dedicated their works to her. Mulla Safi-ud-din Ardbeli of Kashmir who gave a Persian garb to the Arabic classic *Tafsir-i-kabir* (Great Commentary) called it *Zeb-ut-tafasir* in gratitude to his munificent patroness.

* There are others who deny her authorship of the present *Diwan-i-makhfi*. *Makhafi* (or hidden) was a pen-name assumed by Nurjahan and a queen of Akbar. The *Dwan-i-Makhafi* has been published in the *Wisdom of the East Series* (1913).

The poem of Zeb-un-nisa's life has been sullied by the connection of her name with that of a courtier named Aqil Khan. The story,* according to an Urdu life of the princess, is this. In 1662 Emperor Aurangzeb proceeded on a short visit with the members of the royal family to Lahore in order to recoup his health. Aqil Khan, the local Governor, who was a handsome and renowned poet under the pen-name of Razi, and who had heard of the princess' poetic zeal and lost his heart to her, welcomed the opportunity to woo her. Catching sight of her at her palace terrace, the impatient admirer promptly paid incense to her beauty and taste in flowery poetry. Zeb's heart was touched, but she pretended to resist. On a subsequent occasion Aqil Khan learnt that she was in her garden pavilion and, going thither in the guise of a mason, renewed his overtures. He was, he said, the dust wandering round the earth in his longing for her. She replied that, even if he had become transformed into wind, he could not touch a tress of her hair. But Zeb was a woman. Beneath her immaculate exterior, there beat a feminine heart. Repeated interviews, therefore, led to friendliness, and she eventually collapsed. Aurangzeb heard of this with alarm. He rushed from Delhi to Lahore, and pressed his daughter to marry. She chose Aqil Khan; but the coward, alarmed by the fear of imprisonment, vacillated at the last moment and slunk away! Later on, however, the lovers repeated the romantic courting at Delhi. Aurangzeb surprised them once; and the princess, in her sense of guilt, hid her lover in a cooking-vessel! The emperor queried what there was in the vessel, and she hypocritically replied that there was water to be heated. Aurangzeb, with sinister shrewdness, ordered her to put it on the fire. The princess was taken aback and frozen by grief. But even then she was not for surrender. Imploring her lover, for the sake of her honour, to silently bear the torture, she boiled him to death! It was not a thing to smoothen her nerves; but she felt that there was no other method of escape. Had she any

* It is called *Durr-i-Maktdun*. Its author, Munshi Admad-ud-din, depended on an earlier work called *Haiyat-i-Zeb-un-nisa* by Munshi Muhammad-ud-din Khaliq. See J. Sarkar's *Studies in Mughal India*, p. 81.

self-reproach? We do not know. But Aqil Khan had for ever passed out of her life.

This story, however, is not believed to be true by the critical historian. Jadunath Sarkar points out that Aqil Khan was not the Wazir's son but a Persian officer in the emperor's service—first his equerry in the Dakhan in 1652–57 and then successively the Governor of Daulatabad, Faujdar of Delhi, the Superintendent of the Hall of Private Audience, Daroga of Dak Chauki (Post-master-General) and Subadar of Delhi, from 1680 to 1696. Further, he died a natural death in 1696, surrounded by children and grand-children. He could not have, therefore, been boiled in a cauldron in order to save the reputation of a whimsical Mughal princess! The same story, again, is narrated of Zeb's aunt, Jahanara Begum. It was patently diverted to the former by the later-day Urdu romantists of the court of Lucknow in the 19th century. Even such a lover of scandals as Manucci does not refer to any adventure on the part of Zeb-un-nisa; and sober historians much less refer to anything of a similar character. There were periods when Aqil Khan was under the emperor's displeasure and suspended from office; but, though there is mystery in regard to this, Sarkar's view is that the whole story is a myth.

Another fiction regarding Zeb-un-nisa is her alleged love intrigue with the Mahratta hero, Sivaji, during his incarceration at Agra in May 1666. A novel by Bhudev Mukherji, written about 1870, describes the romantic episode and the exchange of rings between them; but it is a pure fiction, and history knows no such episode.

But romance has outlived the iconoclasm of the researcher, and found a place in the pages of credulous story-writers. And some see even in the very title *Diwan-i-Makhafi* a clue to the truth of the story and the real personal meaning in it. They see in the verses of this work—though it is regarded iconoclastically by others as the handiwork of some other person than Zeb—true reflections of the fact that the princess' heart was really touched; that she was not unaware of worshipping eyes and love

babblings; and that her poetic voice has a lack of composure which indicates the feminine quality! Born in the golden sunshine of the palace, used to every type of luxury, Zeb-un-nisa must be naturally expected to display an immeasurable exuberance in life; but strangely enough, we miss it in her verses. It seems as though we hear in them something like loneliness and unhappiness. Her voice seems to be like that of one who missed the sweetest desire of life. She talks like one whose tenderness could not be fitly expended, whose heart was not allowed to touch that to which it was attracted. There is an under-ring of pessimism in her verses. With the beauty of form and the beauty of sentiment they combine a haunting melancholy, a pressing desire for sympathy. But, if Zeb's blood flamed in her cheeks for the sake of a knight-errant, she was too proud to expressly own it. The world might complain and weep for its woes, she says; but she would conceal the pain of her heart, and drink the poison of her grief in silence! From the silence of the sighs of her heart, however, she says, it ought not be concluded that they were powerless. They could set at quenchless blaze even the dark and deep bosom of the sea if they could but reach it!

It was but natural that a soul so capable of feeling was attracted to the Sufi mysticism. Like the early poets of South India, she was never tired of describing and depicting God in the form of a beloved beautiful lover. She compares herself, the loving worshipper, to a lover in despair, a lover beneath whose frozen exterior there burns a furnace, whose sole longing is to twine her arms around His neck in order to live, to be saved from death! Man is a helpless creature, chased by the memory of God. The Lord casts his snare over him, imprisons him in his faith, seizes hold of him even in dreams. And the only way in which He can give man freedom is the way of love. That way is long, dark, meandering! It is full of snares and pitfalls; but it is not lonely. It is trodden by crowds, and these crowds are like the doves falling into a fowler's net. And what about the fowler? He rides

above the hearts of men. He sheds his lovers' blood. He is a tyrant, but a beloved tyrant!

Zeb-un-nisa was profoundly moved by Hindu thought,—she was too much of a worshipper of literary divinity to be a stranger to Hindu intellectualism. She was considerably charmed and benefited by its stimulation. Her poetic sense found satisfaction in the rich Hindu legend and literature. In one of her verses she says that her idol was Sri, the Hindu goddess of wealth. She was not a Muslim, she boldly observes, but an idolater,—a worshipper of Srĭ with the offering of her love. She was not a Brahman; for she had only the plaited hair of the goddess for her sacred thread; but she saw in the mosque not Alla, but the image of Sri. Zeb indeed hurled caution away in the enterprise of her pen. She could not help adoring that adorable goddess! and she was, to her admirers, herself such a goddess. Once the enthusiastic admirer of the princess prayed that she, the envy of the moon, should lift up her veil so that he could feast his eyes with her beauty. She playfully replied: No. If she did it, there would indeed be disaster! The *bulbul* might forget the rose, the Brahman might forget to worship Sri in order to look at her! No, she would be like the fragrance of a flower, unseen. She would be seen by the world in her poems, not in her person. She would hide her personality in her pen, and smile at the world from where she was not visible.

Zeb-un-nisa was for a synthetic cult. She was an enemy of orthodox dogma. Some, says she, paid worship in the mosque; others in the temple; but she held the idol of her worship in her heart! People went to the Kaaba or the temple; but she did not care. She would not mix her praises of God with theirs! She would sit apart, she would dwell outside. To Him, who saw the heart alone, her prayers must be more precious than every fibre of others' sacred thread. It is remarkable that a princess, born to such colossal wealth, and heir to such limitless luxury, was an admirer of poverty. The world, she believed, was a charitable abode for the poor. The

grants of a *fakir* were more regal than the robes of royal majesty, she observes. Zeb was a living paradox of life.

Fate played a freakish and cruel trick on this somewhat lonely soul. Zeb-un-nisa was very fond of Prince Akbar, the emperor's favourite son, who joined the Rajput and Mahratta adversaries of his father, and became eventually an exile in Persia ; and this imprudent attachment led to her being placed by her stern father under restriction at Salimgarh, Delhi, in January 1681. Through Mulla Muhammad Aqil, a learned theologian and supporter of Prince Akbar, she had corresponded with him and identified herself completely with his interests. Aurangzeb punished her not only with imprisonment but with the confiscation of her property and pension (which amounted to four lakhs per year.) It is unfortunate that the princess was so ardent a partisan of the prince. It would not have mattered if her eyes had merely kindled with the sympathy of generosity at fallen greatness ; but her attitude was almost one of treason. However it might have been, a languor seized her spirit, and though her poetic tale was not closed and she was in touch with the fairy land of divine rhyme, she asked herself in despair whether it was her body that had sinned or her soul, which lived and served elsewhere. She felt that, thanks to the fetters which clung to her feet, her friends had become enemies to her ; and her relatives, strangers. Disgraced by her friends she had no desire to keep herself unsullied in her honour. She addressed herself, in desperation, not to seek relief from the prison of her grief ; for it would be hoped for only in the day of judgment !

Zeb-un-nisa died on 20 May 1702, and took her abode, as the chronicler poetically observes, in the palace of inexhaustible forgiveness. She had been deprived of liberty for 21 years. The emperor was deeply moved, and, in spite of his age, shed copious tears at the departure of his talented child. She was buried in 'the garden of 30000 trees' outside the Kabul gate of Delhi. The Mugal Raj has passed into dust ; the political world which was enriched and beautified by Zeb has gone to ruins ;

and even her grave has been destroyed for the sake of the rail-road; and yet, with the passing of time, the name of Zeb-un-nisa has not descended the ladder of fame. For the last two centuries and more she has remained in a shrine at the back of the heart of men of culture. With her ethereal charm and pathetic grace she seems to be more a spirit from the fairy-land than a fragment of earthly personality; and in kneeling before the image of her memory the lover of art and beauty pays a deserved worship to all that is associated with the romance of a dreamland. The picture of her life is, indeed, the picture of an ornament of her age and sex. She was a flower more beautiful than the flowers of her land.

Vain Sacrifice

By DUNCAN GREENLEES, M. A., (Oxon.)

A young man was walking along the boulder-girded path that followed the twists of a little mountain stream. He was very happy, and you could know that by the gay songs which from time to time burst out of his control and went chasing each other, far away down the valley. So happy was he, indeed, that he hardly cared to glance on either side as he went carolling along. Had he done so, he would have seen on the right of him a steep hillside, littered with granite rocks and brightened with little wild flowers, and on the left, the narrow valley with its brook far below amid the tall tree and gurgling on towards the distant river.

We might guess both the source of his happiness and his present object, if we noticed that now and then he took from his breast pocket a photograph, gazed at it with devotion, and kissed it lightly before returning it to the hiding-place. In fact he was on his way to tell the chosen of his heart that his parents were eager to welcome her as a new daughter, and the joy of that news made him deaf to everything. Thus it happened that he did not hear the low sounds from far in front of him, though they were loud enough to send the birds into sudden frightened flutterings on the trees.

For a long time he went merrily on his road, unconscious of all outside the radiant little world which the thought of his message had made in his heart. Then at last the loud shouts which had so long failed to draw his notice somehow broke into that happy dream of his. He looked up. In front of him, blocking the narrow way, was a peasant from Reschen, the very village for which he was bound.

"Are you mad, Otto? Where are you going? Can't you hear the guns?" this stranger was shouting at him. Yes, it was true; that seemed to be guns; men were firing guns somewhere; they must be shooting something, rabbits maybe. He suggested as much to the sturdy villager.

"Shooting rabbits, are they?" The man laughed wildly, and went on. "Yes, they are shooting rabbits, and smoking out their warrens also. The Dictator's army has come a-hunting to our valley, and finds good sport, shooting.....rabbits!"

Something in his manner,—or was it the name of the cruel Dictator?—made Otto dimly afraid as he began to grope towards the truth. He cried, "What do you mean, then? What else can they be shooting at this season?"

The man did not long keep him in suspense. He said with an unsteady voice, "If you want to keep your belief in the good God and in His Virgin Mother, you'll not go there to see. But if you go, you'll hardly come back, to die outside the faith of Catholics." As though suddenly remembering something he had forgotten, he crossed himself hurriedly, and went on, "Jesus save us from all evil spirits!" A pause, and then, "We rose against the Government. All of us peasants joined in the hills. We did not know their army was so close, or so cruel.....*Why* are they cruel?.....Aren't they from our own families? Haven't they known us all since we were little ones?..... *Go*, man; run away quickly from here; even here you are not safe from that horror!"

The last words were spoken with a sudden violent explosion of passion, as from the direction of Reschen itself came the sound of a fresh outburst of that ominous crackling. But Otto was not thinking of safety. Like a mad flame amok in the granaries of harvest, the dreadful thought had turned his dream of happiness to ashes. He ran indeed, but it was towards, and not away from, the sounds of evil omen.

Stumbling often, falling sometimes, but picking himself up again and continuing his wild career without a pause, still not looking once to right or left, he covered the ground so swiftly that he very soon came to the little village. Reschen was still there, it is true, but changed as in a nightmare.

Gone were the smiling cottages with their flowers and friendly open doors. Smoking ruins on either side of the

winding street, bodies lying here and there in ghastly attitudes, and many charred, a troop of soldiers ferreting out survivers,—this is what he saw.

He ran blindly, crying like a frightened bird, until he came to what had been his darling's home. Where it had been,—surely this *was* the place, for here the little bridge crossed the stream that still sand unconcernedly amid destruction,—he found a low heap of smouldering beams and furniture. In front of it, on that very patch of grass where they had exchanged the eternal secret of lovers, which though older than the hills is every moment new, he found her whom he sought. Or rather, he found what had been her. ... The body was still warm, and a thin line of red upon the green earth told the story.

"God, God! Where are You? Where is Frieda? What have You done to her?" The loud cries starled the air... All went black around him. ...

Hearing his wild shout, soldiers gathered round. Taking him at first for one of the revolting peasants, they dragged him to a rock outside the village where their officer was sitting near the singing stream.

This Herr Kapitan-Leutnant Grunen believed himself a kindly man, with an eye to the good of all, even of his enemies. He never inflicted the cruelty of imprisonment on any; that is why he had not taken any into custody in Reschen that lovely summer day. His motto from the start of his military career had been a short and simple one, "Shoot them, or let them go". He had shot many to-day; indeed, his soldiers now assured him there were no more to shoot, save this one who had just come from outside.

Sparing only a single glance at his captive's dress, he snarled at the men, "You fools! Can't you see this man is from the city? He is not a peasant, but a student. Take him away and let him go. But if he comes back again, put a bullet in him, for a stubborn and ungrateful fellow."

Herr Kapitan-Leutnant Grunen felt pleased at his own clemency as he watched the soldiers carrying out his orders

at some distance from the ruined village. Then he wrote the telegram to report his victorious capture of Reschen by storm.

* * *

The dazed Otto, staggering like a drunken man in his grief, hardly knowing what he did, went back again, along the valley path to the little town. Here he found a train that carried him to his city home.

It was in the train a great idea flashed on him, restoring the balance of his mind a little; and to this he gave the broken forces of his life. He would join these helpless peasants and take revenge; then death for him would be like a draught of cool water on a thirsty day.

Six months had gone into the past. Otto was living at home, pursuing his studies quietly, to all appearances like other men. But in his heart a great secret brooded constantly, and in his hand, unseen by others, he held the reins of destiny.

The peasant revolt had somehow held its own; though it could not attain success, yet the active help of many in the cities enabled the hardy hillmen to keep the field against the Government. Plans were maturing for a great rebellion among the farmers of the plains, who were discontent at the many promises broken by the Dictator.

* * * *

Otto was with his sister Anna in the city. The stream of daily life flowed by ceaselessly, heedless, but it was unseen by the two who walked slowly towards some lonely spot. They were rapt in low and earnest talk, and at such times the outside world has no real existence.

"I did not know your Peasant Clubs were meant for a revolution," she was saying. "Of course, I can't help you in that. Nor can I keep it secret from those who ought to warn the Government about the conspiracy, so that it can act."

Her manner became passionate. "It is a shameful thing to plot in secret against our Leader who is day and

night planning to make the Fatherland supreme. And that you, my brother, my own brother, should be doing this thing !"

Otto was astounded. He had doubted whether his sister would approve of the secret purpose of the clubs he had founded all over the northern plains, in nearly every village; but the idea that she might betray the whole scheme just when it was near fruition had never come to him, even in his dreams. He had always trusted her, implicitly. For a space he was silent, while the river of men and vehicles streamed by along the busy street.

Anna spoke again. "What did you expect me to do? Did you think that I *too* am a traitor ?

That little word *too* stung him; he was bitter. "You are loyal to those who shoot unarmed peasants and murder women,— but you do not shrink from playing traitor to your own brother, who has trusted you." Then his mood softened, and he began to plead. "Anna, dear ; remember our mother who loved us both so well. For her sake at least be silent. You cannot help us, but surely you need not help our enemies."

She only replied, mechanically: "It is the duty of every patriotic citizen to help the Government against *all* its enemies."

They had come now to a lonely park, and stood there pleading with each other, but the girl could not be moved from what her conscience bade her do.

Forgetting the need for secrecy, Otto cried aloud and with great excitement ; "Think, sister, what you are doing, before you say words that can never be unsaid. Not my life alone, but the lives of tens of thousands depend on this; their blood, and the blood of their little children, would be on your head if you betrayed us to the Government."

Suddenly he knew, from the crunching of the gravel beneath a human foot, that someone had been standing quietly behind him and must have overheard their conversation. Three or four stood behind. These men surrounded him, and told him quietly that he was a prisoner.

* * * *

At the Court Martial, which was held next day, the prisoner was sternly cross-examined. The first question showed that his judges were already convinced of his guilt, — "Why are you in contact with the rebels?" they asked, and when Otto began to tell what he had seen in Reschen, they exclaimed: "We don't want to hear all that. If peasants were shot, it is what rebels must expect." Then they added, "We know all about your conspiracy; we have the names of most of your leaders, and you will tell us those we have not learnt yet."

Otto shook his head, and was silent.

"We shall see if you can remain silent, or if you will buy your freedom with a word. We have ways that make men talk; we can even cure the dumb," one of the officers threatened him.

Then they talked awhile together in subdued tones. Otto was amazed, and afraid, when the President of the Court announced: "We have decided after all to show clemency in your case. You had some provocation, and perhaps hardly knew what you were doing. You are released."

Tremblingly, Otto left the dark court-room, and came out into the bright sunlight of the street. He did not know that his old friend, Hans, whom he met outside, had become a spy. Hans asked him what had happened, and Otto told him all. Hans replied, "But I think your troubles are not over, for I have just seen the police around your house."

Otto was greatly startled. He remembered a certain secret paper hidden in a book in his cupboard at home. If the police found that, many would be widowed in the Fatherland. He must go home at once and destroy that paper lest the police made a search and found it. Hastily excusing himself to his friend, he almost ran to his house. He did not see that Hans had followed him, suspicious of his haste.

Rushing into his room, he snatched up the book, took out the paper, and had already torn it in halves when Hans

flung himself on him from behind, and brought him struggling to the ground.

"Quick! Secure him! I have got the evidence you need," Hans cried to the police who swarmed in behind him through the door. In a few moments Otto was again a prisoner.

* * * *

The second trial passed like a dream. With a thrill of horror Otto saw the fatal paper lying on the green baize of the table before the President of the Court. So it was with no surprise that he heard the solemn sentence of death pronounced against him. Only an infinite regret that because of his carelessness so many comrades must perish filled his heart with gloom. Life had no more to give him, now that the great rebellion must fail, and the Catholic peasants of the southern hills and valleys must soon be crushed.

He was led away by his gaoler, and passed the night in a dark cell, alone.

Before dawn, a priest came and offered him the eternal consolations of his Faith. He was calm now and resigned. The storms of the world already seemed infinitely remote, of strangely little importance after all.

The door opened to admit the first rays of dawn. The gaoler entered grimly, but vaguely gentle and sympathetic. He looked up at him.

The gaoler's hand tightened on his shoulder. It was a grip of steel, inexorable as death. "Come," he said simply; "It is the time."

The other man rose and followed him without a word.

* * * *

In a very little while, from the yard came the harsh sound of a volley. Then all was silent again.

That morning the year's first snowdrops told of the coming spring upon the hills.

Beauty

The sun is sinking Westward,
  And black rooks homeward fly,
Before the sun's disc vanishes,
  All verdant glows the sky.

The clouds reflect a hundred shades
  Of purple, gold and red,
Aqua-marine the background fades
  O'er which these gleams are shed.

The old green fields of Heaven display
  The twilight's glory bright,
As slowly daylight ebbs away,
  And stars their lanterns light.

The moonbeams, clear as crystal,
  In shower of radiance fall:
They crown the night with silver light,
  Then silence reigns o'er all.

Through the whole Universe, my God,
  Thy beauty is displayed,
And day and night, in shade and light,
  Decks all that Thou hast made.

F. H. Aldhouse.

Unemployment in India: Is it Insoluble?

By DEWAN BAHADUR K. S. RAMASWAMY SASTRI

UNEDUCATED unemployment is assuming as ominous proportions in India as educated unemployment, and both the pathological conditions have to be set right if the Indian people is to attain a higher level of existence. We may not be able to control effectively the world-causes of unemployment such as over-production and maldistribution and high tariffs and insane currency policies all over the world. These will have to be set right by the united wisdom of the world at round table conferences. But local causes could and should be spotted and dealt with quickly and effectively.

Uneducated unemployment has to be met by good schemes of cottage and rural industries. Agriculture provides work only for four to six months in the year and the peasants spend their remaining months idly and unprofitably. The pressure of population on the soil is nearly 75% in India, while only 11% of the population is maintained by the industries. Our *per capita* income is the lowest in the world; and our standard of living is proportionately low, very possibly China is our only rival in that direction! The Indian people suffer from under-nourishment and malnutrition very much.

Educated unemployment is due in the main to the supply of educated men being in excess of the demand. But the remedy is not suppressing higher education but lies in controlling it and directing it in new channels and correlating it to a scheme of industrial expansion in many directions. In fact the essential value of the Wardha scheme lies in its giving a realistic attitude to the national mind, and making at least the children of the lotus-eaters and day-dreamers today able to face the hard realities of modern life.

President Hoover of America said sometime ago that it was the function and obligation of Government "to investigate economic and scientific problems, to point out the remedy for economic failure or the road to progress, to inspire and assist in co-operative action". Much earlier than he, a world-poet of India,—Kalidasa—said that it was the duty of the State to provide for universal employment. The State must aid existing industries, finance new industries, and start some big industries itself till these succeed and are taken over by joint stock companies. In Europe and America many Governments have acted thus. Russia's Five Year Plans are wellknown and include nation-wide literacy and industrialisation and collective agriculture. The Indian Government will have to take cautious steps in the same direction and also use the tariffs to protect nascent industries.

The part of wisdom lies in building on the existing basis instead of vainly sighing for a Utopia. Agriculture must long continue as the mainstay of our people. But by adopting the Wardha scheme and by having a nation-wide drive against illiteracy and by co-operative farming which will enable us to increase our agricultural output without a socialistic regime and by quick introduction of home and cottage industries, we must bring a new confidence and uplift of life in rural India. The Government must embark on a slow and wise scheme of industrialisation in urban India so as to balance agriculture and industry and relieve the pressure on the land and so as to solve the problem of educated unemployment. It is our duty to increasingly minimise our dependence on imported manufactures. A rich nation alone will be a great and cultured and artistic and spiritual nation. A poor nation will have its soul as famished as its body. We want bread as well as manna. Will Government give us the one and help us to get the other by our creativeness, for God helps those who help themselves ?

Current Comments

By AN OBSERVER

The Botanical Survey of India. The Industrial Section of the Botanical Survey of India did valuable work in the field of economic research. It supplied information regarding the Sabai grass which is useful for paper manufacture, and the distribution of wild paddy which can be used for inter-breeding with the cultivated paddy of Bengal. It inquired into the supply and availability of the seeds of Bishop's weed (*carum copticum*), Senna (*cassia angustrifolia*), Sorghum (millet), and the wild paddy *Oryza coarctata* It inquired into the possibilities of cultivating several medicinal plants, besides the Sisal hemp and the Tung oil plants. It identified the materials used in wicker-work by some of the aboriginal tribes and incidentally threw light on ethnological data. It supplied information to a German inquirer regarding the bulbs of Scilla and Urgines and other drugs used in dropsy and heart-disease. The range of investigation, in short, covered the plants useful for food, medicine, and economic progress. Textiles, fibres, timbers, oils, gums and resins, rubber and gutta-percha, basketry materials, tea, coffee, the raw materials of paper, matches and silk, were also subjects of deep research. 'Not only has the economic value of the old medical and economic plants been ascertained, but new ones discovered and tapped. Materials have been supplied to scientific workers all over the world. The Library which has 30000 volumes of books and serials and which is housed in the Indian Museum, the Gallery which contains classified exhibits of all valuable plants, and the Herbarium attached to it, have been active agencies for educating students and the commercial public.

Excavations at Bhita. Very important finds have been unearthed by the Archaeological Department in the historic site of Bhita near Allahabad. The remains of an ancient city going back to the first century B. C. have been discovered there. These remains indicate the existence of definite town-planning in that period. Streets and thoroughfares were carefully laid down, and the frontages of houses and other buildings lined them on either side so that there were the advantages of utility and beauty. Some of the houses and shops indicate respectable size. The former of these had quadrangular courts with rooms arranged round them as in the present day, and show that residential life must have been similar to that of later times. One of the most interesting sets of finds were stamp dies containing the names of the residents; and it has been inferred that these were intended

to seal documents with. As a rule there has been discovered one stamp in each house; but there have been found a number of clay sealings in each, and these have been suggested to be the seals to be affixed to letters received by the owners of the houses. The labels of the house-owners and shop-keepers have a familiar resemblance to modern institutions, and show how advanced were the amenities of urban life in those days in North India.

Central Grants and Rural Uplift Schemes From a Report placed before the Central Legislative Assembly in the beginning of April 1938 an idea can be gained of the improvements which have been effected in village life as the result of grants from the Government of India for rural development. A sum of 195 lakhs has been given by the Central Government to the different provinces for the purpose. Schemes for periods extending over three to five years have been launched in consequence. Rural water-supply, communications, public health and welfare works, the consolidation of holdings, cattle improvement, the distribution of improved seeds, have been chosen as the fields of expenditure, attention being paid to the needs of the province and the popular contribution of one-third of the expenditure, either in money or in labour, or land. The response of the villages has been satisfactory. Free grants of land and labour have been generously made by them for the construction of roads, water-supply etc. The initial suspicion on the part of villages has been followed by enthusiasm and emulation, and a new spirit of cooperative effort and self-improvement has become visible. In the United Provinces a five-year scheme has been adopted. Organisers have been appointed in each district to work in a spirit of missionary service for infusing self-help among the villagers, broadening their outlook and introducing the improvements in agriculture, sanitation, industries etc. There is at the top a Rural Development Board consisting of 31 members, two-thirds of whom are non-officials. It is presided over by the Departmental Minister; and the Provincial Rural Development Officer is the Secretary. District Boards have been appointed for the purpose, and these are linked to the Provincial Board by a staff of officers. The different districts are given the latitude to choose the appropriate channels of improvement. Water-supply and irrigation have been most prominent in Bihar, and the construction of tube-wells, tanks and bathing ghats in Sindh. Well-irrigation and damming of streams for improving the subsoil water level have attracted special attention in Bombay. Assam has shown partiality for wells, tanks and spring water supplies. Central Provinces and Berar have shown the same spirit. Madras has spent 3·4 lakhs in constructing 600 wells and improving water-supply. Roads and earthworks and better farming methods too have attracted attention.

In the U. P., grants have been given to cooperative societies for opening seed exchange stores for supplying the needs of individuals and societies. In Bombay the distribution of better implements and of seeds of improved varieties of paddy, sugarcane, cotton, wheat, bajra and tobacco was made extensively in every district. In Ajmer-Merwara agricultural demonstrations were liberally resorted to. The work of consolidation has been going on in the Panjab, success here being due to the help of the Cooperative and Revenue Departments. It has been done in two or three districts of the United Provinces, too. Fruit-culture has been benefited in Bombay and United Provinces. The distribution of stud-bulls, and the farming of cattle, sheep and poultry have made progress. The blanket-weaving craft has been improved in some areas of Bombay. Spinning and weaving demonstrations have been resorted to in Bengal. Tanning has received attention in Jullunder district of the Panjab. Ropemaking out of coarse grass has been advanced in Sindh. Village sanitation has been carried out in several areas of the U. P. in the form of "the removal of rubbish heaps, the construction of manure pits and soakage pits, the filling up of pits in the inhabited area, the cleaning of wells and the erection of parapets for them, the removal of projecting platforms, the improvement of village lanes and the supply of ventilators for houses." Similarly in Madras a survey of 8000 houses was carried out to study housing conditions and the health of the people, and much propaganda work was done through lectures, talks to women in their houses, demonstrations in schools, cinema shows and the radio. Further, expectant mothers were registered by the health-visitors and given help through the staff of midwives and ante natal clinics. In the Central Provinces travelling dispensaries were provided; and in Ajmer-Merwara commendable work was done by way of gratuitous distribution of medicine through school-teachers in unhealthy areas and during epidemic outbreaks.

Of all the pressing problems of modern India the maternity problem, it need hardly be pointed out, is one of the most important. In his opening address before the All-India Obstetric and Gynaecological Conference at Bombay, in the middle of April, the Hon. Mr. B. G. Kher, the Premier of Bombay, referred to the appalling loss of life in India among women and children on account of illiteracy, poverty, prejudice and harmful social customs. Nearly 45 per cent. of the registered deaths, he pointed out, is among children below five years of age; and more than 30 per cent. of the mothers are disabled on account of the maternity. The provision of trained mid-wives and of other medical facilities in every village is thus a great necessity; and the Congress Ministry is fortunately keenly aware of its importance.

Malayalam Folksongs. Dr. Arnold Bake of Brasenose College, Oxford, who has already visited India twice in order to collect and study the folksongs of India, has now come on a third visit, and hopes to be in this country till 1941. He is now engaged in recording religious songs and music on behalf of the Research Fellowship of the Brasenose College instituted by the Oxford University. The object of the Indian studies in the Oxford University is cultural and economic. As one of the major expressions of Indian culture is Indian folksong and music, it has been decided to prepare films of the songs and dances of the country. Dr. Bake, who was present during the recent Oriental Conference which met at Trivandrum, has visited a number of places and, with the help of local enthusiasts and friends, gathered hundreds of folk-songs illustrative of the social customs and habits as well as the cultural outlook of the people. At Ernakulam he collected and recorded boatmen's song, *panampattu*, *ammanappattu*, *tiruvadirakkali*, Hebrew songs, *chavittunatakam*, *kaikottikkali*, *the ashtapadi*, *the Brahmanippattu*, etc. Dr. Bake belongs to that small but noble band of men who have consecrated their lives to the bringing of the different sections of mankind together by mutual understanding and appreciation.

Co-operation and Progress. The Bihar and Orissa Co-operative Federation Congress passed a Resolution requesting the Government to authorise the Provincial Co-operative Bank to float a loan maturable in 20 to 25 years and with government guarantee in respect of principal and interest, so that long-term capital would be available for the rehabilitation of the co-operative movement. A Government grant of 90 lakhs as a preliminary step to the Bank was recommended; and the Co-operative organization was declared to be the fittest agency for carrying out rural uplift work. A ten-year plan for rural development, it was pointed out, could be framed in consultation with the Co-operative Federation. The Co-operative movement could be made a mass movement for the uplift of the people, and the Government should readily provide the funds and the service of an expert staff for enabling the Co-operative bodies to carry out the work.

In his address before the 8th West Godavari District Co-operative Conference Mr. T. N. Ramakrishna Reddi showed how unwise it is on the part of the Co-operative societies to lock up its 11 crores in a hopeless attempt to finance the past debts of agriculturists amounting to 200 crores, and how wise it will be to devote themselves to the financing of present day improvements in production. He observed:

"Even if all the 11 and odd crores, which form the total investment in the Co-operative Movement, were utilised for discharging the prior debts, it would not materially reduce the burden and the Co-operative Movement

would have to cease all further activities. Thus it is impossible for the Co-operative Movement to attempt to reduce the debt burden of the agriculturist. If instead of locking up this amount in long-term loans for discharge of prior debts and make it 'frozen credit', they employ the funds in helping the ryots to adopt better methods of cultivation and produce better crops, and help them to sell the produce at the most favourable prices by holding them up in go-downs and advancing intermediate loans, they would be not only improving their economic condition but also adding immensely to the wealth of the province. This kind of controlled credit for productive purposes would make the funds mobile and be made to subserve the interests of larger number of persons. Hence by making these investments locked up in long-term frozen credits, they would be hindering the growth and expansion of the movement. If the total indebtedness has to be removed, the Government should take courage in both hands and float a loan of 100 crores at 3 per cent. interest and advance loans to agriculturists to completely wipe off the scaled down debts and thus set them on their feet once again. The Co-operative agricultural societies could then invest all their funds in various productive purposes."

Mr. Reddi went on to observe that, in addition to improving the economic condition of the agriculturist, the co-operative socities should devote themselves to the general uplift of the village life so that they can become what it was in the early and middle ages. The villages should not be mere conglomerations of individuals divided among themselves and without the sense of common purpose. The leaven of social service and rural uplift should be infused into the Co-operative organizations so that they can raise the general level of mass life. The multi-functioning Co-operative movement, he pointed out, is the right thing for the present day. He concluded his thoughtful address with the enumeration of the reforms needed in the Co-operative field. He emphasised the need for the consolidation of the societies; the opening of greater contact with the provincial marketing society; the introduction of the limited liability principle in place of the unlimited liability in the primary sccieties; the grouping together of the smaller societies; the fixing of the borrowing power of individuals not on the common basis but on their relation to holding, income and repaying capacity; the liberal advance of loans by the Reserve Bank on the security of agricultural paper; and the opening of a Savings Bank branch in each society.

Indian music. Mrs. Margaret E. Cousins has recently contributed to the press an interesting comparison of the Hindu music with that of the West. While both East and West have 12 divisions of octave for their sound material, the Indian system alone divides these into 22 *srutis* or quarter-tones which the average Western musician cannot distinguish. In its use of the 12 delightful semitones Indian music is far and away superior to the art of Europe. The different forms of the permutation and combination of the 12 svaras in arrangements of seven have been classified into the

72 well-known *melakartas* or complete scales while selected scales of these have also been brought together to form the *janya-ragas* or partial scales. The West, points out Mrs. Cousins, knows only 3 out of the 72 scales known to Indians. "Only to three combinations of the 12 sounds taken seven at a time does the Western ear respond with keen pleasure or understanding; only to three scale foundations has it become accustomed. The Greeks chose seven out of the possible combinations and used them for centuries; but since about 1500 A. D. four have fallen entirely into disuse either through Western prejudice or its limited aesthetic psychology." Western music, in consequence, is formed only from *Dhira-Sankarabharanam, Kirvana and Gaurimanohara* scales to use the South Indian terminology. Nothing of the "beauty of *Maya-malava-gaula*, the sweetness of *Kalyani*, the pensiveness of *Bhairavi* the strength of *Todi* etc. is known to the Western world. Again, the Western ear is accustomed only to 2 rhythmic divisions of 2,3,4,6,9 or 12 units. But the Indian musician uses, in addition to these, 5,7,10,14 and intermediate numbers up to 29." This peculiarity seems to the ignorant Western musician *chaotic*. The chaos or madness lies not in the system but in the limitation of his conventional knowledge. Another important difference noted by Mrs. Cousins is the sensitiveness of the Indian aesthetic to the relation between the hour, season and mood, and the mode in which the song is sung.

Agricultural Research Institute. From 1905 to 1937 the working of this Institute has cost to Government a debit of 282 lakhs of rupees; but on the other hand, in the single year 1934—35 the agriculturists' income showed, according to a Report of the Institute, an increase of $4\frac{1}{2}$ crores. The Institute has created new varieties of several important food and industrial crops. The improved Coimbatore Sugarcane area, for example, increased from a little above 75000 acres in 1924—25 to above 2·445 million acres in 1934—35, the general total having risen from 2·7 million acres to 3·58 million acres, in India. The money gain in the latter year alone has been estimated at $2\frac{1}{4}$ crores of rupees. Similarly, the area of the Pusa wheat increased by leaps and bounds, so that in 1934—35, thanks to the 6·48 million acres devoted to it, the Ryot had an additional income of 2 crores at the rate of the improved value of Rs. 3 per maund. Pusa is engaged in experimenting on a large number of new varieties of wheats, barleys, pulses, oilseeds, tobacco and other crops. Only those that pass vigorous tests are distributed to cultivators through the Agricultural Department. The Institute has been making a survey of the soils so that their deficiencies and faulty treatments can be eradicated. Fertilisers practically unknown 30 years back,

have been widely popularised. The proportion which the chemical or artificial manures should bear to the organic manures has been indicated, and the conservation of the supply of the latter has been emphasised. The indigenous sources have been investigated, and simple methods, suitable and hygenic, have been worked out for preserving the cattle dung and urine, utilising farm refuse, crushing bones and making their phosphate available to the crops, and using oil-cakes and molasses as manures. The Institute has done much to fight the diseases of crops. The destructive insects and fungi have been studied, and an insecticide for getting rid of their pest has been discovered and popularised. Steps have also been taken to improve cattle. The breed known as Sahiwal, one of the finest milch types in India, has been improved to such an extent that the average milk yield per cow has risen from 5 lbs. in 1914 to 24 lbs. in 1937, the best reaching 40 to 50 lbs. per day. The Report summarises the other works of the Institute in these words:

"Simple methods have been evolved for the conversion of farm wastes and crop residues into good manures, for the utilisation of bones as manure without the use of expensive machinery, for preservation of potato and other vegetables and for producing fine aroma butter and cream. Experiments have been also in progress for some time to improve the method of gur manufacture, and a simple and efficient method for the manufacture of clean gur has been developed which has attracted wide attention. Silkworm rearing, cultivation of the lac and pure honey were other subjects on which also useful contributions helpful to the peasant have been made as a result of studies undertaken."

Karuppan, the scholar-poet of Cochin. A sad loss has been sustained by the Malayalam literary world and by the Araya community in the demise of the talented scholar-poet Karuppan. As a poet who belonged to the depressed classes, he voiced forth their feelings and desires; but his originality and freshness appealed to the whole Malayalam world and brought him admirers. He founded the Cochin-Pulaya Mahajana-yoga. He worked for the uplift of the depressed classes by invoking the sympathy and co-operation of the other classes and not by wounding and alienating them. He was singularly skilful in his musical compositions. They were characterised by their variety as well as melody, as Mr. N. R. Sahasranama Aiyar observed in a recent public meeting at Cochin; and 'it would not be too much to say that he left a void that was difficult to fill.' Mr. Karuppan had been an examiner for the Oriental Titles Examination and Chairman of the Board of Examiners in Oriental Titles.

Book Reviews.

Hind Swaraj By M. K. Gandhi, Price As. 4 *and* **The Power of Non-violence** by Richard B. Gregg, Price Rs. 2—Published by the Navajivan Press, Ahmedabad.

These two books necessarily go together. The first is a veritable Gita for the modern world, and the second, a masterly commentary on one of its chapters.

Gandhiji's booklet is a new edition of a work published first in 1908 when the principle of non-violence as an effective weapon was being evolved. Gandhiji's ideas on India's ultimate goal and method of fighting for it, his views on modern Western civilization with all its implications—law courts, railways, hospitals and machinery—and his discussion of the method of non-violence—these are given in a conversational style with a directness, simplicity and frankness all Gandhiji's own. As Gandhiji himself says. the book "teaches the gospel of love in place of that of hate. It replaces violence with self-sacrifice, it pits soul force against brute force..." We cannot overestimate the importance of such a work at a time when the principles enunciated, far from being chimerical as was once suspected, have come to be recognised now as quite practicable and effective means of securing not only our immediate object of Swaraj but also the larger objects of humanity at large. And one could, therefore, well understand Lord Lothian and Miss Sophia Wadia when they exhort everybody to read and re-read this book to understand Gandhiji properly. This is, indeed, the master's own enunciation of the cardinal tenets of his philosophy. And the method of composition, the breadth of vision, the keen practicality, the pregnant precision and exactitude of expression—these traits irresistibly suggest a similarity to the Gita, on a smaller scale, may be; for let us have no illusions about Gandhiji. But we live in a world much lower than the world of the Pandavas despite our much-vaunted civilization, and Gandhiji, in proportion, is easily our Guru in the creation of a new world of ideas and aspirations. Every thinking person should possess a copy of this book.

The second book is a scientific study of non-violence. Non-violence is largely an attitude of the mind, and action is only its outer expression. The book is, therefore, a study in psychology. But for the sake of convenience, the 16 chapters may be divided into 3 sections, of course overlapping. The first section comprising roughly the first 6 chapters, gives the psychological explanation of non-violence, its inevitable advantages over violence, and shows how this superiority is capable of a scientific explanation. The author's views on this as on other points are supported by eminent psychologists to whom references are given in the detailed notes at the end of the book. It is convincingly shown that non-violence is mainly advantageous in these points:

(a) It takes the struggle into a higher plane and leaves both parties satisfied and better in mind at the end, better friends than before, with greater moral force and good-will;

(b) it makes possible a saving of vast energy that is wasted in the method of violence;

(c) being a struggle of good will, without the limitations of personality, it sublimates energy into higher channels of creative effort—a blessing not only to the parties concerned but to the world at large.

Section 2 comprises chapters VII to XII. It starts with the proposition that fear and anger are one and the same emotion. It proceeds to show, then, that all the principles of military strategy and all the virtues desired in a soldier are of equal necessity in the non-violent soldier also. The discipline of the gentle resister is the controlling and sublimation of the emotion of anger and the instinct of pugnacity even as military discipline is the controlling of the emotion of fear and the instinct of flight. Non-violence is a further step in the military science, because it achieves the same end without the accompanying losses, discontent and rancour. It goes further and produces good-will between the parties and leaves them morally stronger for the fight. Chapters VII and VIII deal with this aspect. In the rest, we are told that non-violence is equally efficient even in the internal administration of the State where so long violence has been the rule. The State usually uses violence in the following cases: (a) In its relations with ordinary rivals or opponents of the State—namely, other States and criminals; (b) in its relations with unusual opponents—conscientious objectors to war and non-violent resisters against some particular law or against the State itself. In these cases also non-violence can be used with success. Some serious objections from militarists like Trotsky and Lenin are, in this connection, met in the chapter "Doubts and Queries."

The next section is perhaps the most important. We see here that non-violence is not an easy thing to practise. A very severe inner struggle has to be gone through before an average man can be non-violent. For non-violence is not confined to action only. Non-violence is of the mind and thought as well as of action. It is a coordination of a similar attitude of the mind and action. Indeed, non-violence in action is only an expression of the non-violent attitude of the mind. The non-violent resister, thus, has an open heart with absolutely no trace of ill-will towards anybody in the world. He is Benevolence, Love, Faith. He must be prepared to do all the work, to have all the suffering, and be ready to leave all the fruit to the world. He must be humble as dust, firm, resolute and unbending as steel. He must be master of himself and teach others not by injunction but by example; he must have a sense of the essential unity of all humanity in place of the separatist tendency of militarism—a difficult ideal, indeed, when we visualise the task of overcoming inborn instincts and effacing the ubiquitous Self. "Know thyself" is the first rule, and then a profound knowledge of human nature These traits can be developed by a suitable atmosphere even as the martial spirit is fostered by particular methods, and suggestions are given in the last chapters for the bringing about of a suggestive atmosphere.

As a whole, the book is a very able commentary on the principle of non-violence, and deserves to be scrupulously studied by all votaries of peace. The language is simple and clear. The author's faith in non-violence, his vast erudition in the subject as also in the allied subjects of militarism and psychology, are evident in the work. An index at the end enhances the value of the book.

S. Vaidyanathan.

Village Theatres. The Foundations of the Indian National Theatre. By Tandra Devi. With a Foreword by Nandalal Bose. Tandra Devi Publications, Tandrashram, Srinagar, Kashmir. Price 10 As.

One of the most heartening features of present-day India is the powerful village movement that has been set afoot. The villages have ever been the bedrock of our civilisation. They have given rise to the countless rivulets that have combined to form the mighty stream of Indian thought which has irrigated all fields of knowledge. They have been the prime makers of all that is best in Indian civilisation and have played their part to perfection. At present, the economic aspect is predominant. It is as well that some one emphasised the cultural aspect, too.

This booklet seeks to lay the foundations of the Indian National theatre. Any movement or institution to be truly national must embrace the countless villages of our land. The efforts of breadwinning taxes all the villager's energy and his creative faculties are 'cribb'd, cabined and confined.' The author recommends the revival of puppetry as a means of self-expression for the rural folk. Sober commercialism has divorced the cinemas from true art and we will be doing a real service to our villagers if we popularise the Doll Theatre before celluloid invades our villages, too. Spontaneity, which is of the essence of art, is killed in the cinemas. Puppetry gives free scope for local adaptations. In certain respects, puppets are even better than human actors, and, the author says, "High drama may be undertaken also with success. 'Hamlet' has been staged with puppets".

The author says that some beginnings have been made in Bengal in popularising the Doll Theatre; and this attempt to give the villagers the higher things, in life, than bread will be watched with keen interest. But the warning that Sjt. Nandalal Bose gives in his Foreword should never be lost sight of: ".....workers will have to take care that they speak the true language of the people and adopt for their stage native modes of expression".

This booklet, written by one who knows, is well worth a study by our social workers It has been profusely illustrated by the author's talented son, J. P. Foulds. *S. V.*

Rational Spiritual Idealism by Satya Dass. Published by the Author, Sharma Nivas, Chatterji Road, Lahore. Price As. 4.

This booklet analyses the present social problems of exploitation, unemployment etc, and professes to show a way out of the tangle. The author holds that the chief motive force of man in his varied activities is self-preservation, and that greed and ignorance are resultant powers. The application of reason to both material knowledge and spiritual knowledge and the shedding the false ideal of self-preservation are suggested as remedies to the present malady of modern civilization which is strongly condemned. The author does not recommend the study of religion in our education. "The religion of man in a human brotherhood shall comprehend all truths that history records and furthermore all wholesome verities, but it will be left for each to find the aggregate for himself, by thought and experience." This is the main idea of the book and the rest is elaboration of this point by means of socialistic platitudes. There is nothing new it it.

Apart from the uselessness of such superfluous repetitions, we are sceptic of persons who cry down religion and pretend to rationalise it. As though religion were an irrational, incoherent dream of some cave-dweller of primeval days! We passionately believe that religion is the outcome of a greater reason than our vehement thinkers are capable of, and modern rationalists would do well, not to rationalise religion, but to try to see reason in the religion that has been handed down to us. Nor can we approve of an education that divorces religion. It would be a bad day for humanity to neglect all cultural heritage and try by itself to "find the aggregate by thought and experience." A life time is not time enough to glimpse the fringes of the religious world and man will be treading a beaten track over and over again and without any fruit, were he to try to discover all truths for himself without seeing what his fathers have done for him. To start where my father started is to stop where he stopped, if not earlier; but to start where he stopped is to advance further in the Great Search and, perhaps, to discover. We wish our thinkers would pause to examine what other thinkers have achieved, before they venture forth their own own schemes of world re-organization.

S. Vaidyanathan.

Picture Composition. Books 1 and 2 by J. Nelson Fraser (Price 5 as. each) *and* **Teacher's Hand-book to Fraser's Picture Composition.** (Price Rs. 1—4—0) by H. Martin. Published by K. & J. Cooper, Publishers, Bombay.

These are two of the most useful class-books that Messrs. Cooper have ever published. The importance of pictures in the instruction of children is coming to be increasingly recognised and rightly so. Mr. Fraser's Picture Composition affords a very good medium of visual instruction. It contains pictures with Indian settings and also many "picture stories". The student's powers of observation are aroused—which is indeed half the battle. Instead of getting ready-made sentences down the throats of young boys, the teacher in this case puts them suggestive questions with reference to the pictures and thus the pupil's power of self-expression is developed. The Teachers' Handbook, written by a well known educationist, contains exhaustive questions and answers on all the illustrations. This is sure to be of immense help to teachers and is bound to make the use of Fraser's "Picture composition" more popular than it now is. Altogether, these two books, in the hands of an efficient teacher, will be a powerful means of instruction to young students and we heartily recommend their use in all schools. S. V.

Heroes and Heroines of India. Books 1 and 2. Price As. 8 each. Macmillan and Co., Ltd.

These two books are very attractive and useful fare for young minds. Lives of great men and women play a very important part in the formation of character, and the inculcation of great ideals and noble ideas in the minds of young boys has a beneficial effect. The personalities dealt with in these books cover all periods of history, Sree Rama and Sree Krishna finding a place along with more recent historical personalities like Mahavira, Sivaji and others. The essential features in the characters of these are brought out in clear and simple language. The books deserve to be used in schools.

An Introduction to Science. Book I By S. Rengachari, M. Sc. The Teachers' Publishing House, Educational Publishers, Madras.

There seems to be no end for the publication of text books for schools. Every author claims to have struck a new path—a pleasanter path for the young boy or girl to traverse. But to us, however, the path seems nothing new. There they are—the old ruts for the traveller to jog along. But we are glad to say that the work under review does not belong to this class. It has been written by one who has mastered the subject and the treatment is quite refreshing. Usually, the teacher holds the hands of the pupil and rushes him across the field of science like a whirlwind until finally the young learner is quite dazed and has no clear impression left in his mind of what he saw. Here, the author adopts a more effective method,—that of stimulating, in the mind of the student, a keen interest in things around him and letting him sip in everything, fully enjoying the taste. Topics of current interest like soap manufacture, paper manufacture, moving pictures etc. are also dealt with. Illustrations are plenty and the printing and get up good. We have no hesitation to recommend this book for school use as the S. S. L. C. syllabus has been strictly followed. *S. V.*

A Text Book of Geography for High Schools. Books I and II. By T. S. Sundaram Aiyar, B.A. The Teachers' Publishing House, Educational Publishers, Madras.

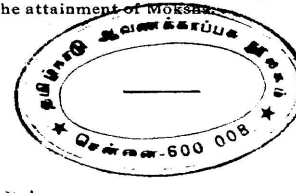
This book has been written by a very experienced teacher in accordance with the amended S. S. L. C. syllabus in geography. The first book deals with the three Southern continents and North America and the second, with Eurasia and India. The presentation of facts is lucid and such as the student will relish. There are a good number of illustrations and photographs. These books will be a complete text book for High School classes. The printing and get-up are good.

The Rose and the Ring. W. M. Thackeray. Tales Retold for Easy Reading. Oxford University Press. Price. As. 8.

This is an abridged edition of Thackeray's story for the benefit of young boys and girls. The language is simple, and Thackeray's humour in situation and expression has suffered no bad treatment. This book is sure to be the school-boy's delight.

The Path of Vedanta, Yoga and Its Objects and The Spiritual Flowers. By Swami Sivananda Saraswati, "Ananda Kutir," Rikhikesh (Himalayas).

The three pamphlets contain the spiritual glories of Yoga and the objects of Yoga. Swamiji exhorts, with real feeling, all spiritual aspirants to follow the path of Yoga and Vedanta as they are the only sure and perpetual road to the attainment of Moksha. S. Vaidyanathan.



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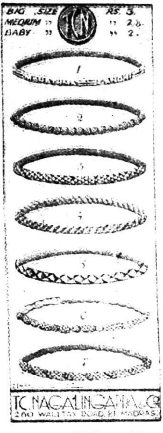

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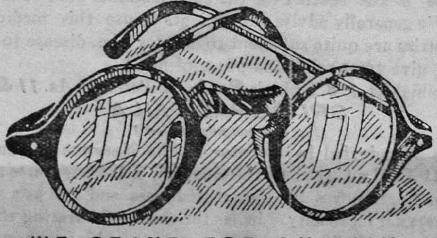

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